



IPW / B

**MAIL STOP: ISSUE FEE**

Attorney Docket No. 249/349

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Notice of Allowance Mailed:

January 4, 2005

In re the Application of

Jung-hyun LEE, et al.

*Previously Pending in*

Art Unit: 2822

Serial No. 10/617,767

Examiner: Christy L. NOVACEK

Filed: July 14, 2003

Confirmation No. 4046

For: DEPOSITION METHOD OF A DIELECTRIC  
LAYER

**REQUEST FOR ACKNOWLEDGMENT OF ENTRY OF PREVIOUSLY SUBMITTED  
INFORMATION DISCLOSURE STATEMENT UNDER 37 C.F.R. §1.56**

Mail Stop: ISSUE FEE  
Commissioner for Patents  
Alexandria, VA 22313-1450

Sir:

An Information Disclosure Statement ("IDS"), Forms PTO/SB/08A and B (2 sheets), an EP Search Report, copies of cited non-U.S. patent references, cited publications, and the fee mandated by 37 C.F.R. §1.17(p) were timely filed on October 12, 2004. A copy of the USPTO receipt evidencing this filing is attached.

In the Notice of Allowability issued January 4, 2005, the Examiner refused entry of certain references for failure to comply with the requirements of 37 C.F.R. §1.98. Contrary to the assertion set forth in the Notice of Allowability, copies of EP 0 540 994 and WO 02/31875 were submitted concurrently with the IDS of October 12, 2004. Copies of the three non-patent publications (identified as CHOI, ET AL., CLARK-PHELPS, ET AL., and WILK, ET AL.) were also submitted on October 12, 2004. It appears that the references submitted may not have been properly scanned into the PTO electronic files, and this may have prevented the Examiner from fully considering the submission.

Further, it appears that the listing of the publications on Form PTO/SB/08B may have given rise to some confusion. This PTO form provides limited space within which to fully identify publications. Therefore the CHOI publication was identified by author, journal, page reference and publication date on the first line with a single asterisk indicating that the title was identified on the second line of the form. Likewise, the CLARK-PHELPS publication was listed on line 3, with a double asterisk indicating the title was set forth on line 4; the WILK reference was listed on line 5 with a triple asterisk indicating the title was set forth on line 6.

U.S. 6,407,435 was identified as a patent family member for JP 2001-267566 for which a full English translation was not available.

To facilitate further consideration of the references originally refused entry, there is attached an annotated copy of Forms PTO/SB/08A and B where (on Form A) each reference currently of record has been so designated, and (on Form B) each of the publication citations has been given a numerical designation in the second column ("Cite No.") further to clarify that only three non-patent publications were being offered for consideration by the Examiner. Duplicate copies of the references originally submitted on October 12, 2004, but refused entry, are also enclosed.

It is submitted that applicant properly and timely complied with the requirements set forth in 37 C.F.R. §1.98 and therefore is entitled to have their IDS submission considered and entered.

In view of the above explanation and the evidentiary submission presented herewith, Applicant respectfully requests that the listed documents be considered by the Examiner and made of record in the present application and that an initialed copy of Forms PTO/SB/08 be returned in accordance with MPEP §609.

Respectfully submitted,

January 26, 2005

Date

  
Eugene M. Lee, Registration No. 32,039

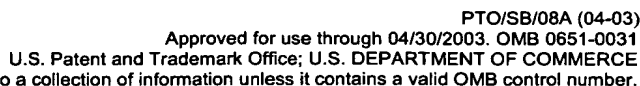
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### DEPOSIT ACCOUNT CHARGE AUTHORIZATION

If fee payment is enclosed, this amount is believed to be correct. However, the Director is hereby authorized to charge any deficiency or credit any overpayment to Deposit Account No. 50-1645.

Any additional fee(s) necessary to effect the proper and timely filing of the above-paper may also be charged to Deposit Account No. 50-1645.



Substitute for form 1449/PTO

**(Use as many sheets as necessary)**

|       |   |    |   |
|-------|---|----|---|
| Sheet | 1 | of | 2 |
|-------|---|----|---|

**Complete if Known**

|                        |                      |
|------------------------|----------------------|
| Application Number     | 10/617,767           |
| Filing Date            | July 14, 2003        |
| First Named Inventor   | Jung-hyun LEE, et al |
| Art Unit               | 2822                 |
| Examiner Name          | C. L. NOVACEK        |
| Attorney Docket Number | 249/349              |

## U. S. PATENT DOCUMENTS

[illegible]

## FOREIGN PATENT DOCUMENTS

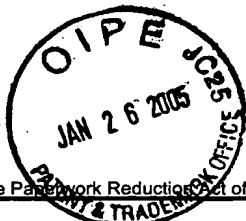
| Examiner<br>Initials* | Cite<br>No. <sup>1</sup> | Foreign Patent Document   | Publication<br>Date | Name of Patentee or<br>Applicant of Cited Document | Pages, Columns, Lines,<br>Where Relevant Passages<br>Or Relevant Figures Appear | T <sup>6</sup> |
|-----------------------|--------------------------|---|---------------------|--|---|----------------|
|                       |                          | Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known) | MM-DD-YYYY          |  |   |                |
|                       |                          | EP 0 540 994 A1   | 05-12-1993          | ARGOS, et al.                                      |   |                |
|                       |                          | EP 1 341 217 A2   | 09-03-2003          | LEE, et al.  | Entered 1/4/05  |                |
|                       |                          | WO 02/31875 A2/A3   | 04-18-2002          | HAUKKA, et al.                                     |   |                |
|                       |                          | JP 2001-267566 *  | 09-28-2001          | MA, et al.   | Entered 1/4/05  |                |
|                       |                          | *=US 6,407,435  |                     |  |   |                |
|                       |                          |   |                     |  |   |                |

|                       |  |                    |  |
|-----------------------|--|--------------------|--|
| Examiner<br>Signature |  | Date<br>Considered |  |
|-----------------------|--|--------------------|--|

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.<sup>1</sup> Applicant's unique citation designation number (optional).<sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04.<sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3).<sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document.<sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible.<sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, Washington, DC 20231.**

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Substitute for form 1449/PTO

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

### Complete if Known

|                        |                      |
|------------------------|----------------------|
| Application Number     | 10/617,767           |
| Filing Date            | July 14, 2003        |
| First Named Inventor   | Jung-hyun LEE, et al |
| Art Unit               | 2822                 |
| Examiner Name          | C. L. NOVACEK        |
| Attorney Docket Number | 249/349              |

Sheet 2 of 2

### NON PATENT LITERATURE DOCUMENTS

| Examiner Initials* | Cite No. <sup>1</sup> | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. | T <sup>2</sup> |
|--------------------|-----------------------|---|----------------|
|                    | 1                     | CHOI, et al., *, Jpn. J. of Applied Physics, 40(4B, Part 1):2940-2942, (April 2001)   |                |
|                    |                       | * Entitled: "Electrical Characteristics of Pt/SrBi2Ta2O9/Ta2O5/Si Using Ta2O5 as the Buffer Layer"  |                |
|                    | 2                     | CLARK-PHELPS, et al. **, Mat. Res. Soc. Symp. Proc. Vol. 670, Society, K2.2.1-6 (2001)  |                |
|                    |                       | ** Entitled: "Engineered tantalum aluminate and hafnium aluminate ALD films for ultrathin ... "   |                |
|                    | 3                     | WILK, et al., ***, Journal of Applied Physics, Vol. 89, No. 10:5243-5275, (May 15, 2001)  |                |
|                    |                       | ***Entitled: "High-k gate dielectrics: Current status and materials properties considerations"  |                |
|                    |                       |   |                |
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|                    |                       |   |                |
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|--------------------|-----------------|
| Examiner Signature | Date Considered |
|--------------------|-----------------|

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached.

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**BEST AVAILABLE COPY**

LEE & STERBA, P.C.

Docket No. 249/349

The "Received" stamp of the U.S. Patent & Trademark Office hereon acknowledges receipt of the following:

In re the Application of

Jung-hyun LEE, et al.

Serial No. 10/617,767

Filed: July 14, 2003

For: DEPOSITION METHOD OF A DIELECTRIC LAYER



Art Unit: 2822

Examiner: Christy L. NOVACEK

Confirmation No. 4046

☒ Information Disclosure Statement under 37 C.F.R. §1.56 with Form PTO/SB-08, Copy/EP Search Report, 6 Reference(s) and PTO-2038